

Custody of Cocaine-Exposed Newborns: Determinants of Discharge Decisions

ABSTRACT

Objectives. Maternal cocaine use is a leading grounds for newborn foster placement. This study was initiated to investigate the factors that predict custody status of infants born to substance-abusing women.

Methods. A retrospective cohort design was used to study the correlates of discharge custody decisions for 99 consecutive infants testing positive for cocaine in a public hospital.

Results. The population was 49% Black, 40% Hispanic, and 11% other or unknown. Custody at discharge was to mothers (38%), other family members (25%), or agency foster care (36%). Placement outside the family was greater when mothers had prior child welfare records, in Blacks vs others, with no prenatal care, and when mothers were younger at their first delivery or older at the index birth. Denial of custody to the mother was higher with prior child welfare involvement, in Blacks, and when the mother did not live in her own home. Both models also controlled for parity, child sex, and birthweight.

Conclusions. Earlier involvement with child welfare authorities, race, and other factors predict continued separation of mothers and children at newborn discharge, suggesting the need to reexamine current policies and practices. (*Am J Public Health*. 1993;83:1726-1729)

Daniel R. Neuspiel, MD, MPH, Terry Martin Zingman, MPH, Virginia H. Templeton, BA, Paula DiStabile, MSN, JD, and Ernest Drucker, PhD

Introduction

Substance use in pregnancy is a major social and medical problem, affecting the woman, her new child, and other family members.¹ Because of concern about the ability of drug-using women to care adequately for their children, child protection authorities in many jurisdictions have acted to separate these mothers from their infants after birth.²⁻⁴

In the state of New York, child abuse and neglect laws have been applied in cases in which newborn urine assays have shown evidence of illicit drugs, particularly cocaine or its metabolites. Local child welfare authorities in New York City are delegated the authority to investigate such cases and to decide temporary placement at the newborn's hospital discharge. These decisions are made after input by hospital social work staff and assessment of the family and home environment. Some of these infants are discharged to their mothers or other family members, and some are discharged to foster care agencies for nonfamily placement. On occasion, mothers may voluntarily agree to have their infant placed in foster care. Maternal cocaine use has become the leading grounds for newborn foster placement in New York City. Substance use also contributed to the 29% nationwide increase in foster care between 1986 and 1989.⁵

In New York State, immediate newborn discharge placement is followed by a family court determination of custody and may not represent the long-term location of custody. However, separation of mother and child at this time may have a lasting impact on the mother-infant relationship.⁶ Prior studies have not reported on factors influencing the decision to send a cocaine-exposed newborn home with his or her mother or to foster care placement

with a relative or agency. Also, no previous research has studied the predictors of foster care placement of infants of substance-abusing mothers. Although child welfare policy calls for reunifying separated mothers and children, little information exists on the success of current policies in promoting family cohesion. This study was performed to explore the determinants of newborn discharge custody placement in a cohort of cocaine-exposed infants.

Methods

Subjects

This investigation used a retrospective cohort design. The study sample included all newborns testing positive for cocaine or its metabolite benzoylecgonine by enzyme-immunoassay-technique urine assay⁷ from July 1990 through May 1991 at a public hospital in New York City. During this period, there were 3261 births at the hospital. Cocaine toxicology tests were ordered selectively in newborns with at least one of the following criteria: (1) no documented prenatal care, (2) known maternal history of illicit drug use, (3) maternal or newborn signs or symptoms consistent with drug exposure, or (4) birth outside the hospital. The study period im-

The authors are with the Department of Epidemiology and Social Medicine, Albert Einstein College of Medicine and Montefiore Medical Center, Bronx, NY. Daniel R. Neuspiel is also with the Department of Pediatrics, Albert Einstein College of Medicine and Montefiore Medical Center, and the Department of Ambulatory Care, North Central Bronx Hospital.

Requests for reprints should be sent to Daniel R. Neuspiel, MD, MPH, NCBH 4M-08, 3424 Kossuth Ave, Bronx, NY 10467.

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mediately preceded the implementation of a modified child welfare investigation and placement policy in New York State in June 1991. The new policy eliminated lack of prenatal care and extrahospital births as criteria for newborn toxicology.

Data Collection

Research staff gathered all information by systematic review of maternal and infant medical records using prepared coding forms. The chart reviewers were not aware of the specific goal of this investigation.

Statistical Analysis

Chi-square tests (for categorical variables) and *t* tests (for continuous, normally distributed variables) were used in conducting bivariate comparisons. Ordinal grouped variables were examined with the Kruskal-Wallis one-way analysis of variance. Multiple logistic regression was used to control simultaneously for several independent variables predicting discharge custody status. SAS software was used for all analyses.⁸ Methods described by Schlesselman⁹ were used to determine confidence intervals on multiple logistic odds ratios.

Results

During the study period, 99 infants were identified with positive urine assays for cocaine or benzoylecgonine. Reasons for toxicology testing (not mutually exclusive) were known history of drug use (64), clinical signs of drug use in mother or newborn (6), lack of prenatal care (31), and extramural delivery (11). Custody at newborn discharge (see Table 1) was to birth mothers (38%), other family members (25%), or agency foster care (36%). No differences were noted in reasons for testing between these custody groups.

Mothers who retained their infant's custody at discharge were younger at the index childbirth, although their first deliveries occurred at an older age (both *P*s < .05). Mothers who kept their newborns were also less often Black (*P* < .01). They were more likely to live in their own home and to have fewer previous children and any prenatal care (all *P*s < .05). Education level (high school completion) did not differ by discharge status or ethnicity. Reported history of substance use did not differ in the three custody groups.

Of mothers with previous children, those who retained custody at discharge were less likely to have had previous reporting to the local or state child welfare

TABLE 1—Characteristics of Mothers of 99 Cocaine-Positive Newborns, by Discharge Custody Status

	Discharge Status		
	Mother (n = 38)	Other Relative (n = 25)	Agency (n = 36)
Mean maternal age, y (SD)	26.8 (5.3)	27.2 (4.3)	29.8 (4.6) ^{aa}
Mean maternal age at first birth, y (SD)	20.4 (3.9)	20.1 (3.2)	18.3 (4.1) ^{aa}
Ethnicity, no. (%) ^{***}			
Hispanic	23 (61)	8 (32)	9 (25)
Black	10 (26)	14 (56)	24 (67)
White	3 (8)	2 (8)	2 (6)
Unknown	2 (5)	1 (4)	1 (3)
Education level, no. (%)			
≥12 y	17 (45)	7 (28)	11 (31)
<12 y	9 (24)	6 (24)	14 (39)
Unknown	12 (32)	12 (48)	11 (31)
Lives in own home, no. (%) ^{ba}	23 (61)	11 (44)	11 (31)
One or more prenatal visit, no. (%) ^{ba}	31 (82)	20 (80)	20 (56)
Multiparous, no. (%) ^{ba}	28 (74)	24 (96)	33 (92)

^a*t* test: agency vs mother and agency vs relative.
^bChi-square test.
^{*}*P* < .05.
^{aa}*P* = .04 (*t* test: agency vs mother).
^{***}*P* = .01 (chi-square test excluding unknowns).

TABLE 2—Child Welfare History of Mothers of 99 Cocaine-Positive Newborns, by Discharge Custody Status

	Discharge Status		
	Mother (n = 38)	Other Relative (n = 25)	Agency (n = 36)
Prior child welfare record, ^a no. (%)	5 (13)	18 (72)	27 (75)
No prior record, no. (%)	23 (61)	6 (24)	6 (17)
First child, no. (%)	10 (26)	1 (4)	3 (8)
Prior child placed in foster care, ^a no. (%)	2 (5)	13 (52)	21 (58)
Prior children in foster care, ^a median no. (range)	0 (0–2)	1.5 (0–7)	2 (0–9)

^aAgency or family foster care.
^{*}*P* < .0005 (chi-square test comparing groups with previous children).

agency (*P* < .0005; Table 2). Index newborns with prior siblings in agency or family foster care were more likely to have been discharged to nonmaternal care. Among 50 mothers with prior child welfare records (range = 0 to 9 children, median = 2 children per mother), 109 prior children were known to have been placed out of maternal care in the past, and 107 children were placed out of maternal care at the time of the index birth. The number of prior children placed out of maternal care was higher among mothers whose index children were not discharged to their custody (*P* = .095, Kruskal-Wallis test). Newborn characteristics of the study subjects (Table 3) did not differ by discharge custody status.

Two models were used in performing a multiple logistic regression analysis (Table 4): (1) agency (nonfamily) placement vs mother or other relative and (2) nonmaternal placement (relative or agency) vs mother. Independent dichotomous (prior child welfare involvement, Black vs non-Black, no prenatal care, not living in own home, primiparous, and newborn gender) and continuous (maternal age at index and first birth and newborn weight) variables were entered simultaneously in both models.

Previous involvement of the mother with the child welfare agency was the strongest predictor of nonmaternal discharge placement; it was less strongly related to nonfamily placement. Black race

TABLE 3—Neonatal Characteristics of 99 Cocaine-Positive Newborns, by Discharge Custody Status

	Discharge Status			
	Mother (n = 38)	Other Relative (n = 25)	Agency (n = 36)	Total (n = 99)
Female gender, no. (%)	15 (39)	12 (48)	22 (61)	49 (49)
Birthweight <2500 g, no. (%)	10 (26)	6 (25)	11 (31)	27 (27)
Mean birthweight, g (SD)	2865 (486)	2748 (693)	2669 (566)	2764 (572)
Mean birth length, cm (SD)	48.1 (2.9)	48.2 (4.0)	47.2 (3.9)	47.8 (3.5)
Mean birth head circumference, cm (SD)	32.4 (2.5)	32.4 (1.8)	32.6 (2.9)	32.4 (2.5)
Mean gestational age, wk (SD)	38.6 (1.7)	37.3 (3.0)	38.0 (2.3)	38.1 (2.3)

TABLE 4—Predictors of Discharge Custody of 99 Cocaine-Positive Newborns: Multiple Logistic Regression

Independent Variable	Model 1 ^a : Nonfamily Discharge		Model 2 ^b : Nonmaternal Discharge	
	Odds Ratio	95% Confidence Interval	Odds Ratio	95% Confidence Interval
Prior child welfare involvement	1.81	0.95, 3.43	3.74	1.91, 7.34
Black vs non-Black	1.78	0.98, 3.25	2.04	1.08, 3.86
No prenatal care	2.02	1.10, 3.70	1.06	0.54, 2.11
Not living in own home	1.68	0.94, 3.00	2.56	1.25, 5.24
Female child	1.52	0.85, 2.70	1.39	0.73, 2.65
First child	0.50	0.17, 1.43	1.84	0.65, 5.22
Maternal age, y ^c				
At first child	0.76	0.62, 0.93	0.95	0.79, 1.13
At index delivery	1.16	1.03, 1.31	0.97	0.85, 1.11
Newborn weight, g ^c	1.00	...	1.00	...

^aOdds ratio of risk for agency placement vs mother or family, controlling for other variables.

^bOdds ratio of risk for agency or family placement vs mother, controlling for other variables.

^cContinuous independent variable (odds ratio of the change in risk with change of one unit of independent variable in same direction).

was also predictive of discharge away from the mother and less predictive of nonfamily discharge custody. In neither model were any interactions noted between ethnicity and prior child welfare reporting. In addition, lack of prenatal care predicted nonfamily placement, and the mother's lack of her own home was associated with her not gaining custody of her newborn at discharge. Lower age of the mother at first delivery and older age at delivery of the index newborn were also predictive of nonfamily placement.

Discussion

The discharge custody status of newborns known to be cocaine exposed may be influenced by many factors, including

local policies and practices,³ individual differences influencing parenting ability and the home environment, and the availability of a family support network. Some of these placements may have been emergency dispositions prior to final court action and may not necessarily reflect court-ordered custody decisions. Others may have been voluntary placements by mothers hoping for judicial leniency in final custody decisions.

Federal statutes require that, before the placement of a child in foster care, "reasonable efforts" be made to prevent the need for removal and to enable the child to return to his or her home.¹⁰ In New York, state social service statutes call for families to be kept together whenever possible, not to be separated solely

because of poverty, and to be offered services to "maintain and strengthen family life."¹¹ These statutes affirm "the state's first obligation" as assisting "the family with services to prevent its break-up or to reunite it" when the child is separated.^{12,13} Unnecessary protracted foster care "may deprive these children of positive, nurturing family relationships and have deleterious effects on their development."¹⁴ Courts may order agencies to "encourage and strengthen" the parental relationship, including helping parents with "housing, employment, counselling, medical care or psychiatric treatment."^{15,16} Also, courts and parents may agree to a temporary separation from the child with plans to reunite after successful drug treatment.

The role of prior child welfare involvement in increasing the likelihood of removal of subsequent newborns from the home raises questions about compliance with federal and New York State regulations. These statutes explicitly require reasonable efforts for family unification, while early newborn placement may result in long-term separation of children from their birth families. Although repeated removal of newborns from the same addicted mother may reflect her lack of response to drug treatment or other services, it may also indicate the system's failure to individualize assessments and to adequately provide needed services. An overtaxed child welfare system with limited resources may focus on short-term goals of perceived child protection rather than the broader efforts needed to protect children by strengthening and preserving family units.

Reunification of foster children with their birth parents has been supported because (1) the child's well-being is enhanced by continuous caretaking, (2) the birth parents have legal and social priority as permanent caregivers, (3) the child may be psychologically harmed as a result of the separation of foster care, and (4) the state avoids the cost and recruitment of foster parents.¹⁷ But in an era of shrinking resources for family support, limited drug treatment services for women with children,¹⁸ and staff cutbacks, such reunification is more difficult to achieve. In addition, child welfare agencies are under legal pressure to make rapid determinations of newborn custody status.

Families that could be helped are all too often simply written off, as yet another child begins a career of foster placement. In the name of protection, crimes are being committed not only against children but against parents, who are

left without authority or responsibility and whose only remaining power is to create more children.¹⁹

In this context, previous records of reporting to these authorities, rather than triggering assistance in family reconstruction, may become a convenient way to identify mothers "at risk" for subsequent parenting deficiency. Overworked and understaffed child welfare agencies may view prior reports as indicators to separate mother and infant until a court determination is made; however, this approach may not be most beneficial to family preservation. The knowledge of cocaine exposure may itself be influenced by social or racial bias in decision making for drug toxicology testing and reporting.²⁰ Such biases may also have an impact on custody disposition decisions. Furthermore, in a selectively screened population such as ours, newborns with positive cocaine toxicology may differ from the general population of cocaine-exposed newborns at this or other hospitals.

Reasons for ethnic disparity in patterns of newborn custody disposition other than direct bias may pertain. Multi-generational patterns of substance use may differ across ethnic groups. Blacks in the population under study may have had less available extended family support to allow mothers or other family members to retain newborn custody because of the severity of drug addiction, unemployment, homelessness, and premature morbidity and mortality. Access to health and legal services and voluntary foster placement may also vary with ethnicity. Of additional concern in these data are the independent effects of lack of housing and prenatal care on newborn discharge dispositions, since these are important indices of social deprivation. Thus, lack of social resources for housing and accessible health care may predispose to loss of child custody.

The cocaine epidemic of the late 1980s led to an overwhelmed child welfare and foster care system and to a plethora of "boarder babies": newborns housed for weeks and months in hospitals for lack of court-determined discharge placement. As this crisis leveled off, New York state and city social service authorities imple-

mented modified policies concerning neonatal urine toxicology screening (memoranda of June 1991 from the New York State Department of Social Services, the New York City Health and Hospitals Corporation, and the New York City Human Resources Administration-Child Welfare Administration). These changes eliminated lack of prenatal care and extrahospital births as sufficient criteria for newborn toxicology testing. Parental drug use is no longer sufficient to determine child maltreatment, although evidence of such use still triggers a child protective investigation. Time limits were set for family and home investigations after reports to authorities of newborns with positive drug toxicologies. The results of these policy changes are not yet clear.

The medical chart data in this study did not afford complete information to understand fully the determinants of discharge custody decisions. Information was usually lacking on past maternal drug use and treatment, detailed family or home assessments, whether foster placement was voluntary, and specific location of prior foster placements, although child welfare investigators presumably had access to these data. Further research is needed to understand the process of discharge custody decision making in regard to drug-exposed newborns. Prospective evaluation of long-term outcomes of these decisions for children and families needs special attention. In particular, the effects of early separation on mother-infant attachment and maternal self-esteem need elucidation. Most important, studies are needed of interventions to enhance the cohesion and reconstruction of families with substance abuse problems. The societal costs of foster care, family disruption, and untreated chemical dependency are considerable. Removal of the drug-exposed infant from his or her family may not be uniformly beneficial to the child, the family, or society. □

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